Triangulum: A Landmark Project

At a Glance
- Worth around £4.5 million (EUR 6 million)
- Transforms the 'Manchester Corridor' into a 'smart quarter'
- Learnings will be used to develop smart quarters in other European cities
- Employs latest energy management technologies
- Autonomous energy grid demonstrates how the entire district could be supplied with heat and electricity
- Greater use of electric vehicles

Triangulum by Numbers

1 Manchester Oxford Road Corridor
Horizon 2020: €80bn of EU funding over 7 years
19 bids across EU for Smart Cities funding May 2014
3 Lighthouse Project winners
€88m Triangulum project funding

3 Lead Cities: Manchester, Eindhoven and Stavanger
3 Follower Cities: Prague, Sabadell and Leipzig
3 Manchester Workstreams: Energy, Mobility, ICT
1 Manchester City Council and 2 universities
1 Smart City Platform: MCR-I Open Data Platform

Siemens Technology & Triangulum
- Decentralized Energy Management Systems (DEMS)
- Virtual Power Plant (VPP) management using various Siemens solutions
- Siemens SieStorage Lithium Ion Batteries
- Network Topology Analysis
- Distributed Generation Asset Modelling Software
- Building Management System integration

Partners
Led by: Fraunhofer IAO
With:
- Manchester City Council
- The University of Manchester
- Manchester Metropolitan University
- IT Solutions provider ‘Clicks and Links’ www.clicksandlinks.com
- Siemens Plc

Project Timeline

<table>
<thead>
<tr>
<th>Project Kickoff</th>
<th>Technical Implementation Report</th>
<th>Hardware Installation</th>
<th>Use Cases Operation</th>
<th>Final Report</th>
<th>Cities Dissemination</th>
<th>Project Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>02/02/2015</td>
<td>01/11/2015</td>
<td>01/04/2016</td>
<td>01/08/2016</td>
<td>01/02/2019</td>
<td>01/08/2019</td>
<td>01/02/2020</td>
</tr>
</tbody>
</table>

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